



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,024	08/18/2004	Masaki Morimatsu	SIMTEK6935	5023
25776	7590	01/04/2006	EXAMINER	
ERNEST A. BEUTLER, ATTORNEY AT LAW 10 RUE MARSEILLE NEWPORT BEACH, CA 92660			LAM, THANH	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8V

Office Action Summary	Application No. 10/711,024	Applicant(s) MORIMATSU, MASAKI	
	Examiner Thanh Lam	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/26/05 have been fully considered but they are not persuasive.
2. In response to applicant's argument that cited reference 6534880 does not show "an integral construction", the Examiner submits that the cited reference 6534880 clearly shown the an integral portion (52,53) as indicated the office action.

Regarding to features "the integral construction or portion to be harden", the Examiner submits that cited Tajima shown the harden feature (302), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,3-5,11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sone et al. (US 5,534,880).

Regarding claim 1, Sone et al. disclose an electrical generator for an internal combustion engine having an engine shaft, said generator being comprised of a hub portion (54) adapted to be affixed for rotation with the engine shaft, a rotor portion integrally formed with said hub portion and having a first, integral cylindrical portion (56) extending in one axial direction therefrom for carrying a plurality of circumferentially spaced permanent magnets (58) for cooperation with a stator, and a second, integral cylindrical portion (52,53) extending in an axial direction opposite to said one axial direction for forming a race for a one way clutch (61) for rotatably coupling a starter gear to the engine shaft.

Regarding claim 3, Sone et al. disclose the hub portion has radially extending flange from which the cylindrical portions extend.

Regarding claim 4, Sone et al. disclose the cylindrical portions are radially spaced from each other.

Regarding claim 5, Sone et al. disclose the radially extending flange from which the cylindrical portions extend has a step dividing it into radially inner and outer portions.

Regarding claim 11, Sone et al. disclose permanent magnets affixed to the first, integral cylindrical portion and a one way clutch cooperating with the second, integral cylindrical portion, the hub portion being fixed for rotation with an engine shaft.

Regarding claim 12, Sone et al. disclose including a starter gear journalled on the engine shaft and coupled thereto by the one way clutch.

Regarding claim 13, Sone et al. disclose the hub portion has radially extending flange from which the cylindrical portions extend.

Art Unit: 2834

Regarding claim 14, Sone et al. disclose the cylindrical portions are radially spaced from each other.

Regarding claim 15, Sone et al. disclose the radially extending flange from which the cylindrical portions extend has a step dividing it into radially inner and outer portions.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2,6-10,16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sone et al. in view of Tajima et al. (US 6,739,977).

Regarding claims 2,6,16, Sone et al. disclose all the aspect of the claimed invention except for the surface of one of the integral cylindrical portion is hardened.

Tajima et al. disclose a surface of one of the integral cylindrical portion is hardened (302) for purpose of strengthen the rotor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the surface of (62) of Sone et al. to accommodate the surface is hardened as taught by Tajima et al. in order to improve the strength of the rotor.

Regarding claims 7, 17, the proposal in combination of Sone et al. and Tajima et al. disclose the surface of the second, integral cylindrical portion forming the race is hardened.

Regarding claims 8, 18, the proposal in combination of Sone et al. and Tajima et al. disclose the surface of the radially extending flange from which the second, integral cylindrical portion extends is also hardened.

Regarding claims 9,19, the proposal in combination of Sone et al. and Tajima et al. disclose a fillet is formed at the juncture of the hardened surfaces.

Regarding claims 10,20 the proposal in combination of Sone et al. and Tajima et al. disclose the surface of the fillet is also hardened.

Conclusion


5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (571) 272-2026. The examiner can normally be reached on tu-th 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)



Thanh Lam
Primary Examiner
Art Unit 2834
